

COLG/ ★ P62 L5586 D/45 ★ GB 1601-889  
Surgical knife with detachable sheath - has nib on handle locating  
in hole in sheath

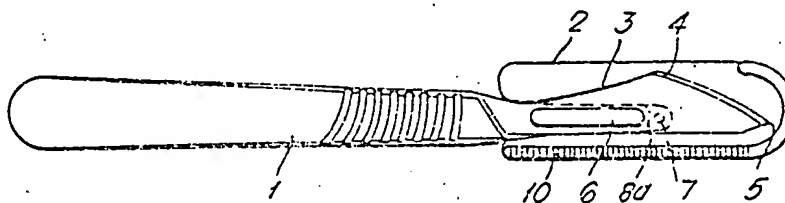
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31.05.78 as 025178 (935JB)

The knife has a blade sheath detachably mounted on the handle by a snap connector. The connector is a hemi-spherical locating nib (8) at one end of the handle, which engages a hole (7) in the sheath. The nib lies in a recess (8a) formed between the tip of the handle and an overlying part of the blade, which receives a part of the sheath when mounted on the knife.

The knife (partic. a surgical scalpel) can be removed by one handed pressure against ribs (10) in one end of the guard, and the sheath can be re-attached after use. (3pp Dwg.No.1)



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## (54) KNIVES

(71) I DAVID JOHN COLGATE a British Subject of 2 Greenacres Lane, Penn. Bucks. do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

According to the invention, a knife has a blade sheath detachably mounted thereon by a snap connector between the sheath and the knife handle and formed by elements comprising a protruding nib on the handle or sheath and a corresponding aperture to receive the nib in the sheath or handle respectively, the connector elements being located in a recess between the handle and an overlying part of the blade which receives a part of the sheath when mounted on the knife.

The invention is particularly applicable to surgical knives or scalpels. At present, it is normal practice to provide scalpels with snap-on sheaths requiring a two-handed operation to remove the sheath and once removed, the sheath cannot be replaced to prevent risk of accident when the unit is discarded.

One embodiment of the invention will now be described, by way of example, with reference to the accompanying drawings in which:

Figure 1. shows a plan of a sheathed scalpel according to the invention

Figure 2. shows an edge view of the scalpel

Figure 3. shows an enlarged section of part of the scalpel

The scalpel comprises a thin, flat elongated handle 1 one end of which encases the adjacent end of a thin flat blade 3. The blade extends in the longitudinal direction of the handle, and the part external of the handle has one edge 4 sharpened for cutting and extending to the blade tip 5, and the other edges unsharpened.

The handle is formed of a thermo-plastic material e.g. S.A.N. or A.B.S. or impact polystyrene, and is welded by a strip 6 onto the blade 3 locking the blade on to the handle 1.

The flat U-shaped sheath 2 which includes

a raised peripheral guard 9, is made from thermo-plastic material e.g. S.A.N. or A.B.S. and is attached to the handle by means of a hemi-spherical locating nib 8 at one end of the handle 1 which engages a hole 7 in the sheath 2. The nib lies in a recess 8a formed between the extreme tip of the handle and the blade and which forms a housing for a part of the sheath which contains the hole 7 and is located just beyond the legs of the U-shape and which lie on either side of the part of the handle supporting the blade.

The sheath is removed by a one-handed operation using pressure from the thumb against ribs 10 formed in one end of the guard 9. The sheath can be re-attached and disconnected without any risk of damage to or by the cutting edge of the blade.

The scalpel as described is finally sealed in a peel-apart-envelope which is transparent on one side so that the blade and shape is visible, and the entire interior of the envelope together with the scalpel is rendered sterile so that, in an operating theatre, it merely requires the sheath to be removed from the blade by breaking the connecting strip from the handle and the scalpel is ready for use.

## WHAT WE CLAIM IS:—

1. A knife having a blade sheath detachably mounted thereon by a snap connector between the sheath and the knife handle and formed by elements comprising a protruding nib in the handle or sheath and a corresponding aperture to receive the nib in the sheath or handle respectively, the connector elements being located in a recess between the handle and an overlying part of the blade which receives a part of the sheath when mounted on the knife.

2. A knife according to claim 1 wherein the sheath is in the form of a flat plate having a raised guard portion extending around a part of its periphery.

3. A knife according to claim 2 wherein the guard is ribbed to provide a grip for engagement by the thumb to detach the sheath from the blade.

4. A knife according to claim 2 or 3 wherein the sheath is U-shaped and has the

aperture of the snap connector located just beyond the legs of the U.

5 A knife constructed and arranged substantially as herein before described and shown in the accompanying drawings.

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Fig. 1.

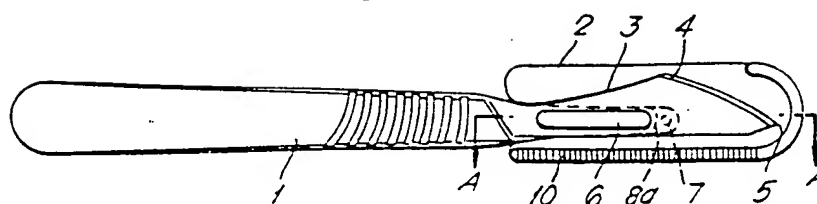


Fig. 2.

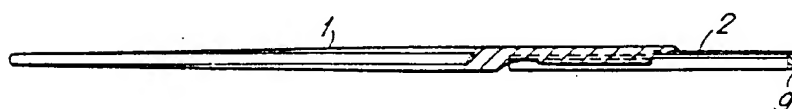


Fig. 3.

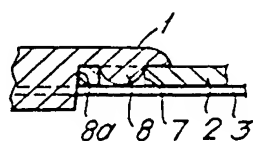


FIG. 1.

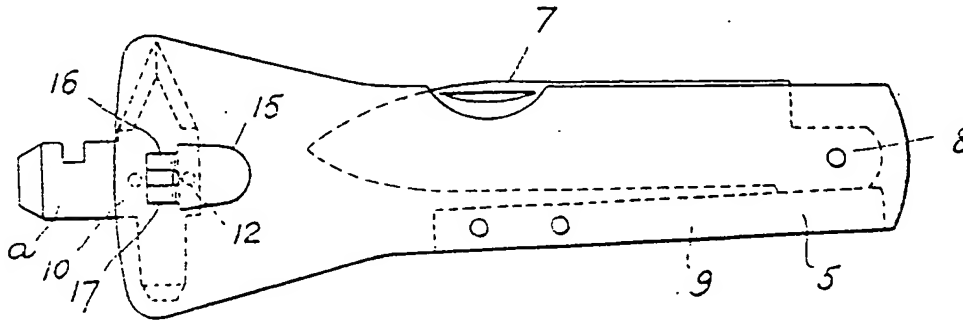


FIG. 2.

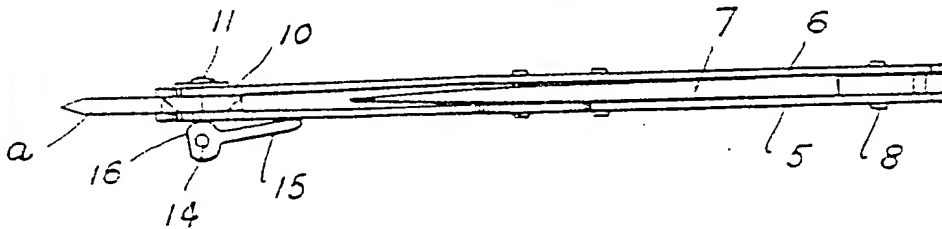


FIG. 3.

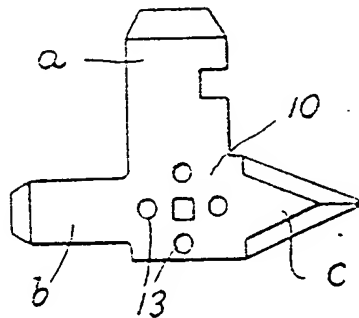
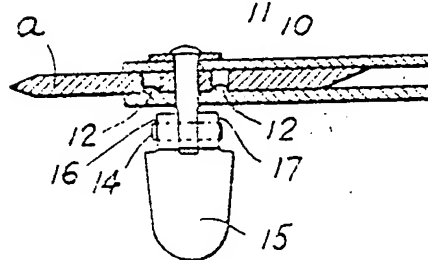


FIG. 4.



[This Drawing is a full-size reproduction of the Original.]